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Patent claims

- 5 1. A system for providing information in a motor vehicle as a function of the state of the driver, characterized by
- 10 a) a device (2, 3, 4) for sensing objective load factors, in particular the state of the motor vehicle and/or the conditions of the motor vehicle relating to the surroundings, which act on the driver,
- 15 b) a device (7) for sensing the driver activities, c) a device (9, 10, 11) for sensing the driver-specific driver characteristics which influence the driving of the vehicle,
- 20 d) an information processing unit (1) for generating an information profile as a function of the load factors which act on the driver, the driver activities and the specific driver characteristics which influence the driving of the vehicle, and
- 25 e) an output device (13, 14, 15, 16) for outputting the information which is determined by means of the information profile.
- 30 2. The system for providing information according to claim 1, characterized in that, by means of a characteristic diagram, stored in a data memory (21), for workload classification, the information processing unit (1) determines the workload level of the driver as a function of the load factors, the driver activities and the driver characteristics which influence the driving of the vehicle, and the information is output as a function of the workload level which is
- 35 determined.

3. The system for providing information as claimed in claim 2, characterized in that the workload is classified in terms of the type of workload on the driver, in particular according to a visual,  
5 acoustic and/or haptic workload.
4. The system for providing information according to one of the preceding claims, characterized in that, in order to sense the driver activities, the  
10 driving maneuvers which are initiated by the driver and/or the operator control element actuation operations which are performed by the driver are detected.
- 15 5. The system for providing information as claimed in one of the preceding claims, characterized in that the device (11) for sensing the driver-specific driver characteristics which influence the driving of the vehicle senses short-term driver  
20 characteristics, in particular, the degree of tiredness, the degree of stress, the degree of distraction, the emotional state and/or the state under the influence of alcohol or drugs.
- 25 6. The system for providing information as claimed in one of the preceding claims, characterized in that the device (10) for sensing the driver-specific driver characteristics which influence the driving of the vehicle senses long-term driver  
30 characteristics, in particular the driver properties in terms of driving style, driving competence, nervousness, anxiousness, state of health, reaction capability and/or readiness to act.
- 35 7. The system for providing information as claimed in one of the preceding claims, characterized in that

the information processing unit (1) determines the type of information which is to be output.

- 5 8. The system for providing information as claimed in one of the preceding claims, characterized in that the information processing unit (1) determines the time when the information which is to be output is output.
- 10 9. The system for providing information as claimed in one of the preceding claims, characterized in that the information processing unit (1) determines the amount of information and/or the information density.
- 15 10. The system for providing information as claimed in one of the preceding claims, characterized in that the information processing unit (1) outputs the information as visual and/or acoustic and/or haptic data.
- 20 11. The system for providing information as claimed in claim 10, characterized in that the visual data is output as text data and/or symbolic data and/or graphics and/or videos.
- 25 12. The system for providing information as claimed in claim 11, characterized in that the information processing unit (1) determines the length of the text data.
- 30 13. The system for providing information as claimed in one of the preceding claims, characterized in that functions can be triggered by means of operator control elements and these functions are categorized into operator control options of differing extent and are stored in a data memory (23), and a selection device (1.1) is provided for
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determining an operator control option as a function of the load factors, the driver activities and the driver characteristics which influence the driving of the vehicle.

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14. The system for providing information as claimed in claim 13, characterized in that an input device (17, 18, 19, 20) is provided for carrying out the selected operator control option.
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15. The system for providing information as claimed in claim 14, characterized in that the input device (17) has means (18, 19, 20) for operator control input, the information processing unit (1)
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- determining the type of operator control input, in particular the operator control input being possible by voice and/or manually and/or visually.
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16. The system for providing information as claimed in one of claims 13 to 15, characterized in that the selected operator control option comprises at least the functions which are necessary for driving.
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17. The system for providing information as claimed in one of the preceding claims, characterized in that the information which is to be output comprises vehicle state information, operator control information, information relating to the
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- surroundings and warning messages as well as information from communications devices.